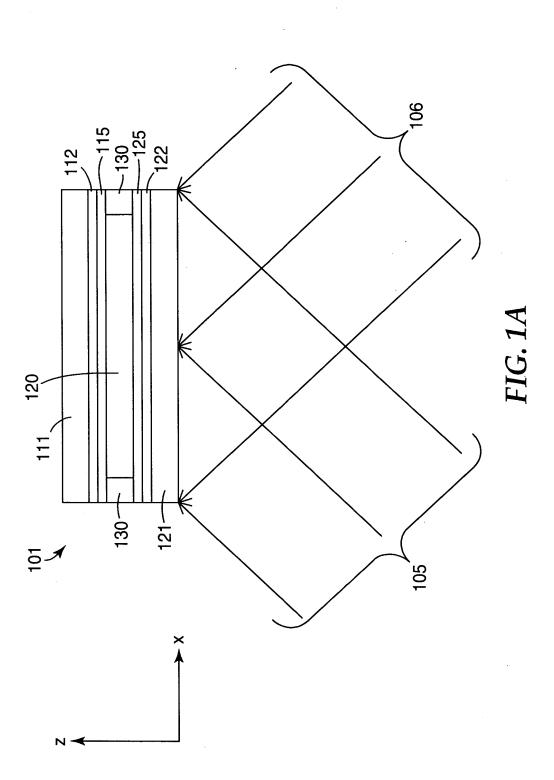
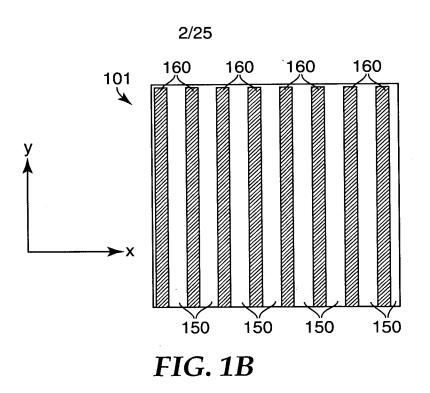
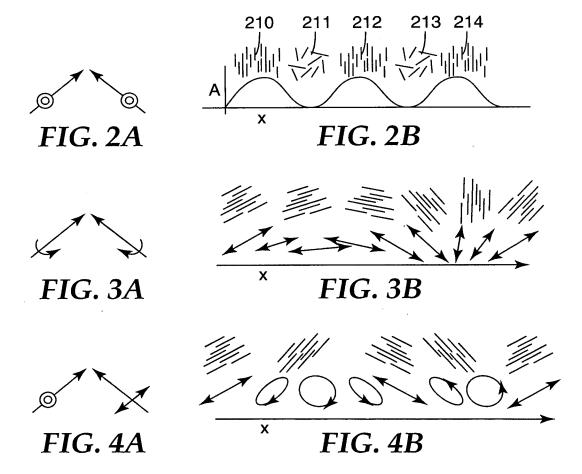
First Named Inventor: Crawford, Gregory P. Case No.: 59067US002
Application No.: 10/748562
Title: Alignment of Liquid Crystals







Case No.: 59067US002 Application No.: 10/748562 Title: Alignment of Liquid Crystals



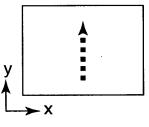


FIG. 5A

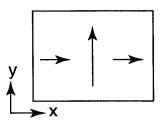


FIG. 5B

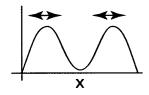


FIG. 5C

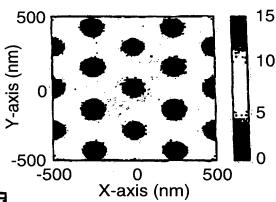


FIG. 6A

500 Y-axis (nm) -500 E 0 X-axis (nm) 500

FIG. 6B

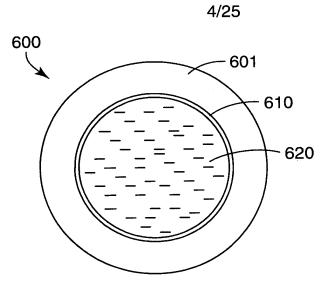


FIG. 7A

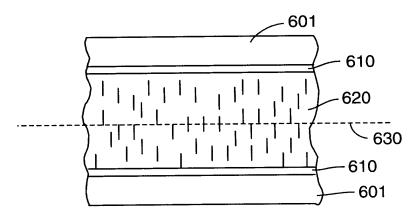
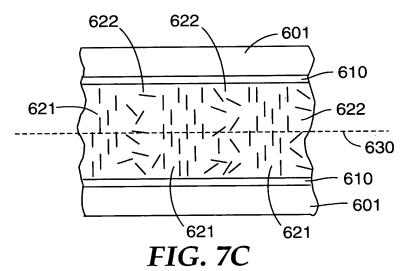


FIG. 7B





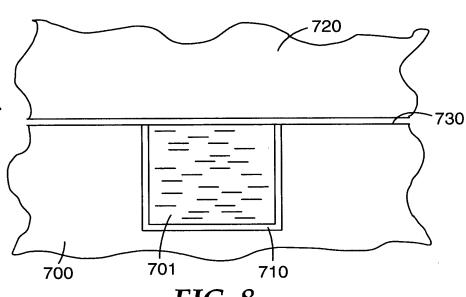
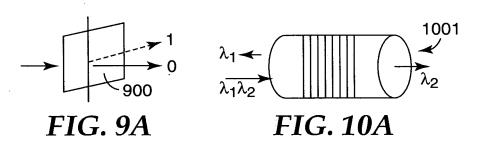
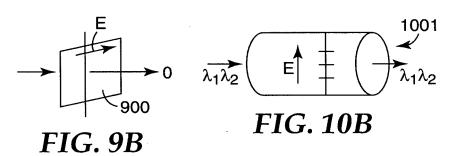


FIG. 8





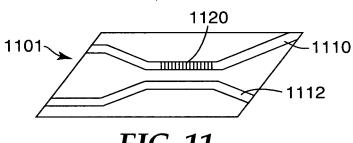


FIG. 11

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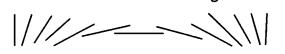


FIG. 12A

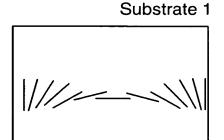


FIG. 12E

amplitude

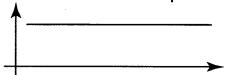


FIG. 12B



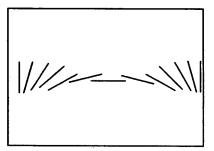


FIG. 12F

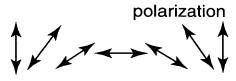


FIG. 12C

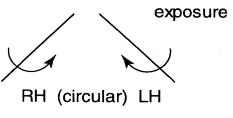


FIG. 12D

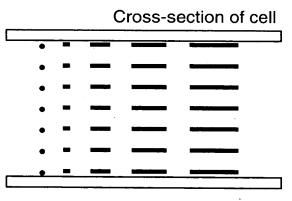


FIG. 12G

Case No.: 59067US002 Application No.: 10/748562 Title: Alignment of Liquid Crystals

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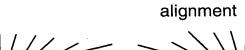


FIG. 13A.

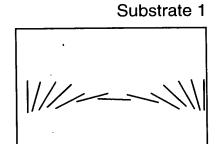


FIG. 13E

amplitude

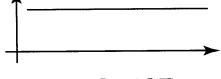
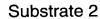


FIG. 13B



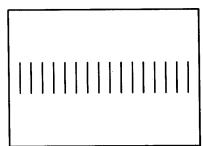


FIG. 13F

polarization

FIG. 13C

Cross-section of cell

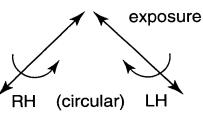


FIG. 13D

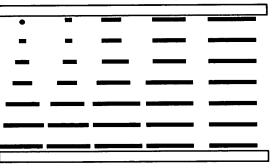


FIG. 13G

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alignment

1///

FIG. 14A

amplitude

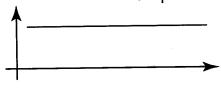


FIG. 14B

polarization

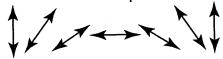


FIG. 14C

exposure

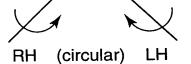


FIG. 14D

Substrate 1

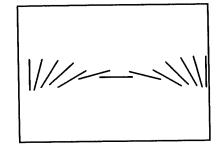


FIG. 14E

Substrate 2

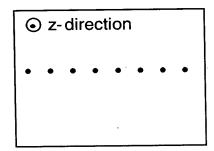


FIG. 14F

Cross-section of cell

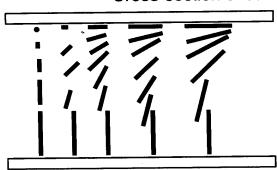


FIG. 14G

Case No.: 59067US002 Application No.: 10/748562 Title: Alignment of Liquid Crystals

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Substrate 1

alignment

11//

FIG. 15A

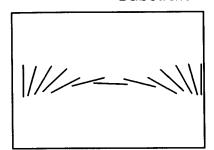


FIG. 15E

Substrate 2

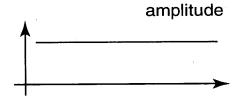


FIG. 15B

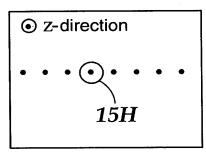


FIG. 15F

Cross-section of cell

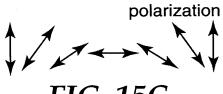


FIG. 15C

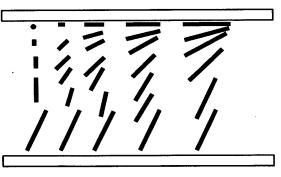


FIG. 15G

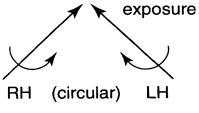


FIG. 15D

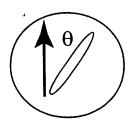
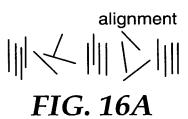
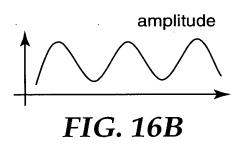


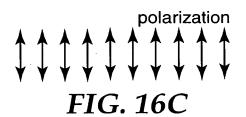
FIG. 15H

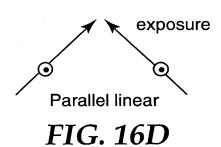
Case No.: 59067US002 Application No.: 10/748562 Title: Alignment of Liquid Crystals

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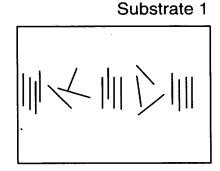


FIG. 16E

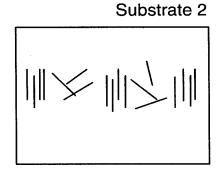


FIG. 16F

Cross-section of cell

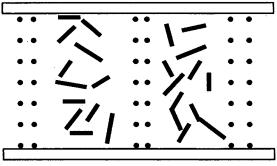
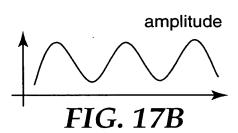


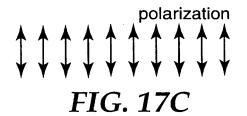
FIG. 16G

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FIG. 17A





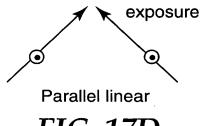


FIG. 17D

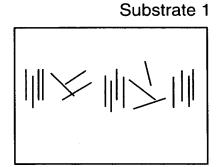


FIG. 17E

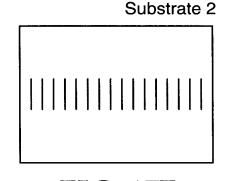


FIG. 17F

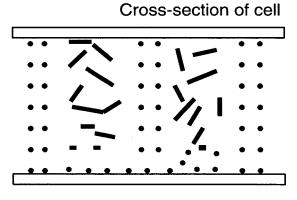


FIG. 17G

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FIG. 18A

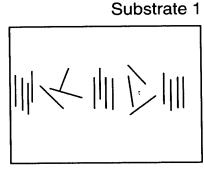
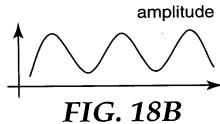
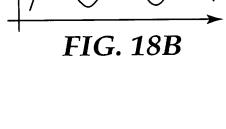


FIG. 18E





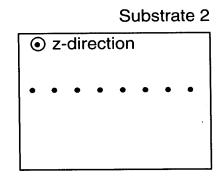
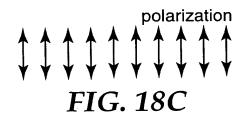
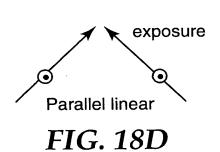


FIG. 18F





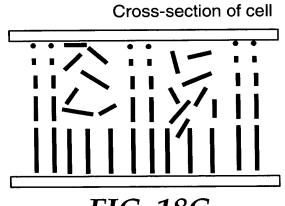


FIG. 18G

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Substrate 1

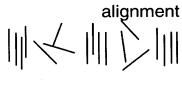


FIG. 19A

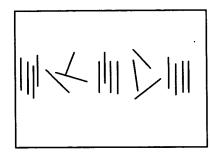
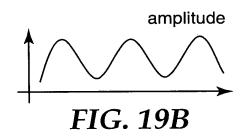


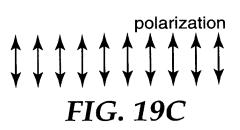
FIG. 19E

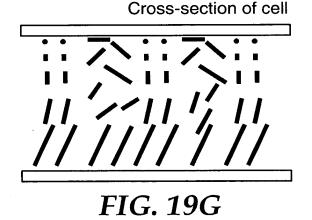
Substrate 2

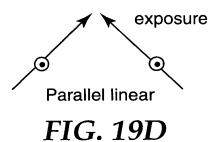


z-direction 19H

FIG. 19F







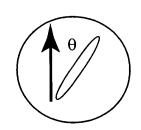
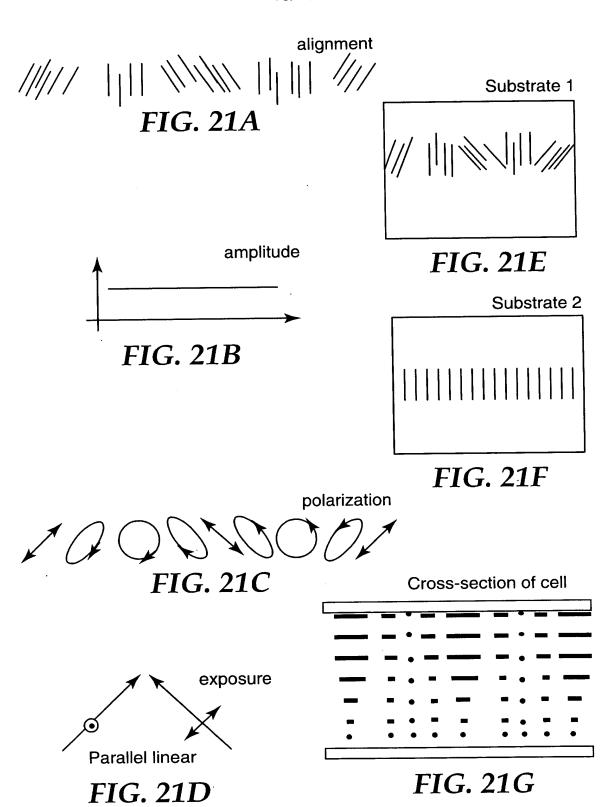


FIG. 19H

First Named Inventor: Crawford, Gregory P. Case No.: 59067US002 Application No.: 10/748562 Title: Alignment of Liquid Crystals 14/25 alignment Substrate 1 FIG. 20A **FIG. 20E** amplitude Substrate 2 FIG. 20B **FIG. 20F** polarization FIG. 20C Cross-section of cell exposure Parallel linear FIG. 20G FIG. 20D

First Named Inventor: Crawford, Gregory P. Case No.: 59067US002

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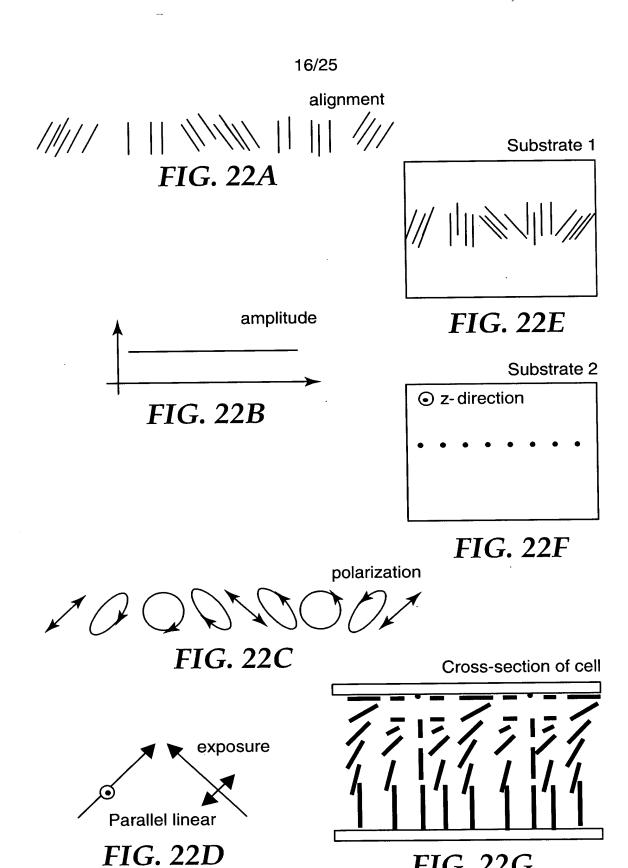
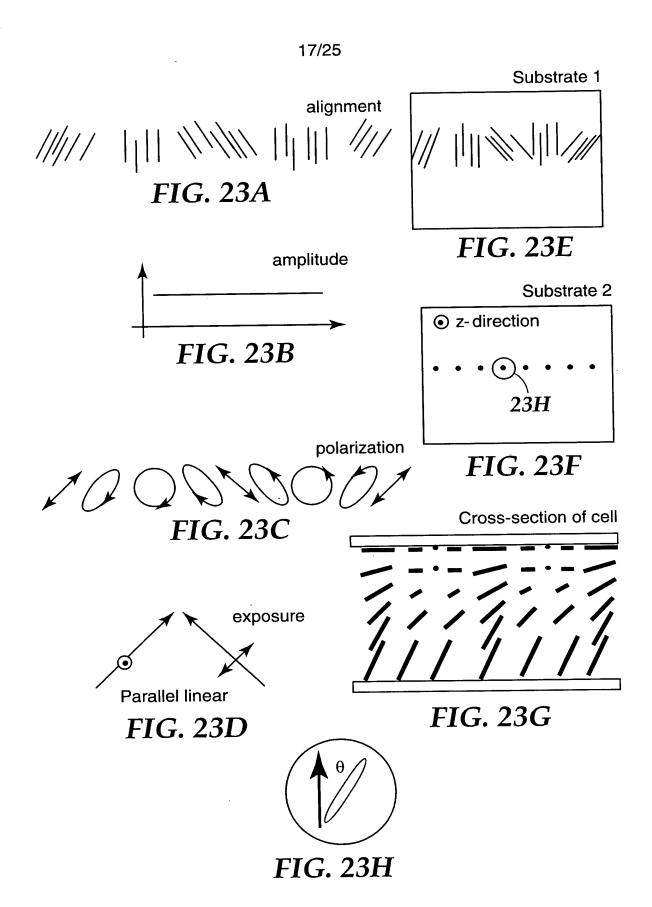
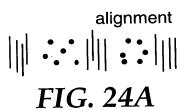


FIG. 22G



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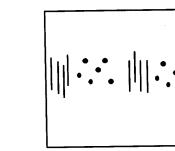
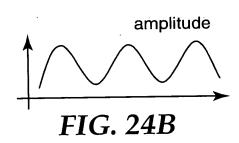


FIG. 24E

Substrate 1



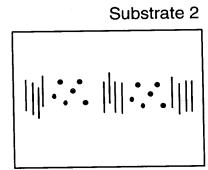
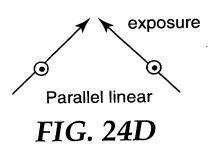


FIG. 24F



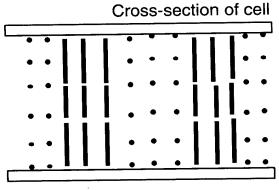
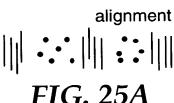
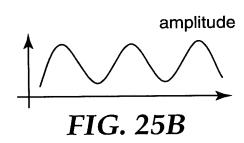


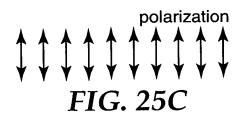
FIG. 24G

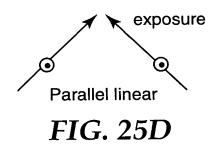
Case No.: 59067US002 Application No.: 10/748562 Title: Alignment of Liquid Crystals











Substrate 1

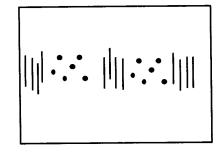


FIG. 25E

Substrate 2

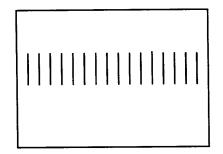


FIG. 25F

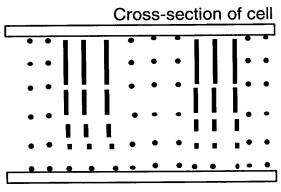
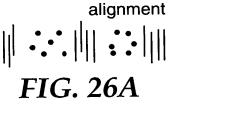
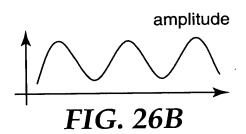


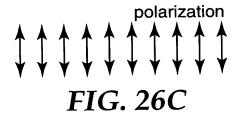
FIG. 25G

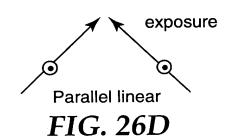
Case No.: 59067US002 Application No.: 10/748562 Title: Alignment of Liquid Crystals











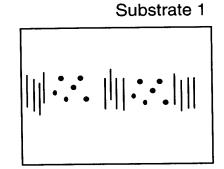


FIG. 26E

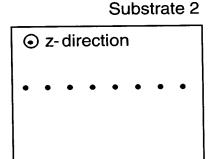


FIG. 26F

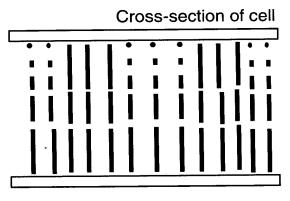


FIG. 26G

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alignment

FIG. 27A

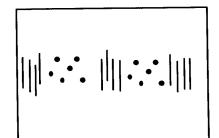


FIG. 27E

amplitude



FIG. 27B



Substrate 1

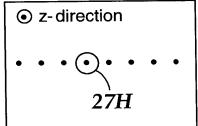
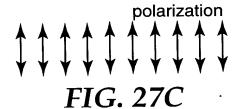


FIG. 27F



Cross-section of cell

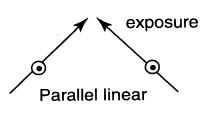


FIG. 27D

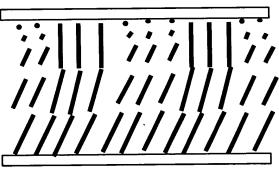


FIG. 27G

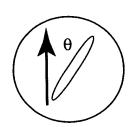
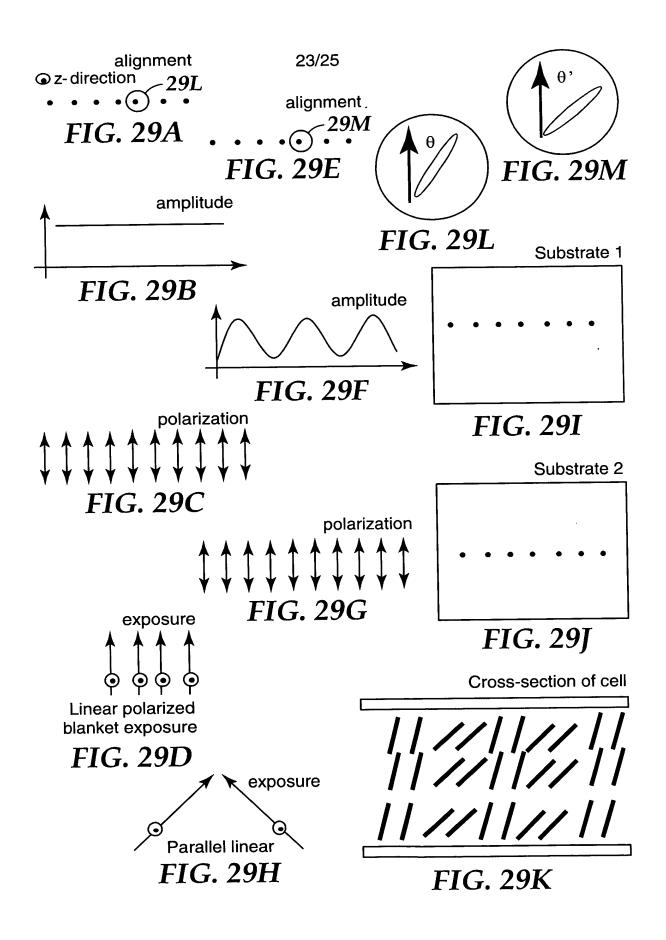
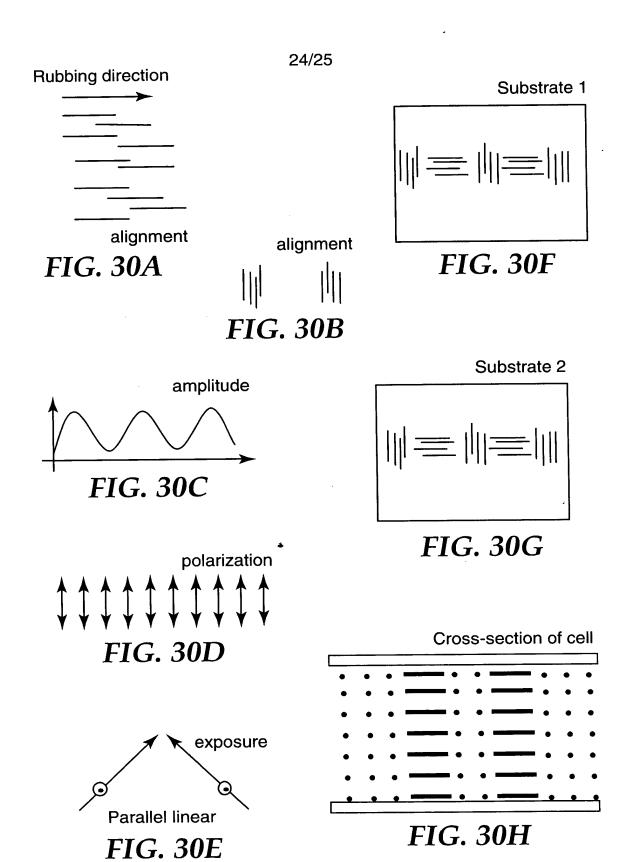


FIG. 27H

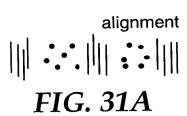
22/25 exposure alignment Parallel linear (+/-45°) FIG. 28A alignment FIG. 28H Substrate 1 FIG. 28E amplitude FIG. 28B amplitude FIG. 28I Substrate 2 FIG. 28F polarization FIG. 28C polarization FIG. 29J FIG. 28G Cross-section of cell exposure Linear polarized blanket exposure FIG. 28D FIG. 28K

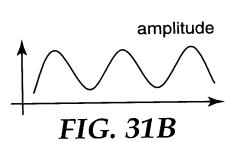
First Named Inventor: Crawford, Gregory P.

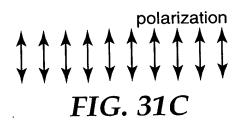


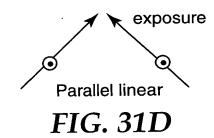


Case No.: 59067US002 Application No.: 10/748562 Title: Alignment of Liquid Crystals









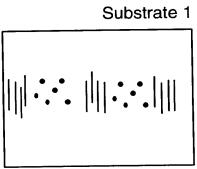


FIG. 31E

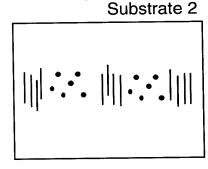


FIG. 31F

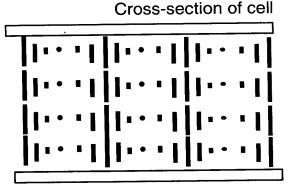


FIG. 31G